Appl. No. 10/501,426   Page 2 of 9
Amendment and/or Response
Reply to Office action of 21 February 2008

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) ~~An~~ A method of audio encoding ~~scheme for~~ a stream that carries audio and video data, ~~which scheme has~~ including:

encoding the audio data to provide a mean effective audio frame length $\overline{F}$ that equals ~~the~~ a video frame length $1/f_V$ over an integral number M video frames, ~~by provision of~~

wherein the encoding includes varying lengths F of the audio frames ~~variable~~ j ~~in length F~~ in a defined sequence of frame lengths $F(j)$ ~~at encoding~~.

2. (Currently amended) ~~An encoding scheme according to~~ The method of claim 1 ~~in which~~, wherein the frame length F is adjusted by varying an overlap O between successive audio frames.

3. (Currently amended) ~~An encoding scheme according to~~ The method of claim 1 or claim 2 ~~in which~~, wherein the value $F(j)$ repeats periodically on j, the periodicity of $F(j)$ defining a sequence of frames.

4. (Currently amended) ~~An encoding scheme according to~~ The method of claim 3 having M video and N audio frames per sequence, each audio frame being composed of k blocks of t samples each.

Appl. No. 10/501,426
Amendment and/or Response
Reply to Office action of 21 February 2008

Page 3 of 9

5. (Currently amended) ~~An encoding scheme according to~~ The method of claim 4 ~~in which~~, wherein a total overlap O_T between frames in the sequence is equal to $O_T = p \times O + q \times (O + 1)$, where O is an overlap length in blocks where $p \in \aleph \wedge q \in \aleph \wedge O \in \aleph \wedge O_T \in \aleph$.

6. (Currently amended) ~~An encoding scheme according to~~ The method of claim 5 ~~in which~~, wherein only audio frames corresponding to a particular video frame are overlapped.

7. (Currently amended) ~~An encoding scheme according to~~ The method of claim 6 ~~in which~~, wherein $p = (N - M) \times (O + 1) - O_T$ and $q = (N - M) - p$.

8. (Currently amended) ~~An encoding scheme according to~~ The method of claim 5 ~~in which~~, wherein only audio frames corresponding to a particular video sequence are overlapped.

9. (Currently amended) ~~An encoding scheme according to~~ The method of claim 8 ~~in which~~, wherein $p = (N - 1) \times (O + 1) - O_T$ and $q = (N - 1) - p$.

10. (Currently amended) ~~An encoding scheme according to~~ The method of claim 5 ~~in which~~, wherein any adjacent audio frames are overlapped.

11. (Currently amended) ~~An encoding scheme according to~~ The method of claim 10 ~~in which~~, wherein $p = N \times (O + 1) - O_T$ and $q = N - p$.

12. (Currently amended) ~~An encoding scheme according to any one of claims 4 to 11~~ The method of claim 4 in which $\exists n \in \aleph^+ : n \times t = M \times \left(\dfrac{f_A}{f_V} \right)$.

Appl. No. 10/501,426   Page 4 of 9
Amendment and/or Response
Reply to Office action of 21 February 2008

13. (Currently amended) ~~An~~ A method of audio encoding ~~scheme for~~ a stream that encodes audio and video data ~~in which scheme~~, including

encoding audio samples of N quasi video-matched audio frames ~~are encoded~~ in frames with a ~~semi-variable overlap~~ defined sequence of overlap lengths, ~~whereby the~~

wherein an effective length of the audio frames coincides with ~~the~~ a length of a sequence of M video frames, where M and N are positive integers.

14. (Currently amended) A data stream encoded by ~~a scheme according to any preceding~~ the method of claim 13.

15. (Currently amended) ~~A data stream according to~~ The data stream of claim 14 ~~which includes audio frames~~, wherein each ~~of which~~ the audio frames is tagged to indicate ~~the~~ a size of the audio frame.

16. (Currently amended) ~~A data stream according to~~ The data stream of claim 14 ~~or claim 15 which includes audio frames~~, wherein each block of ~~which~~ each audio frame is tagged to indicate whether or not the block is a redundant block.

17. (Currently amended) An audio encoder for coding audio for a stream that carries audio and video data, wherein ~~in which~~ the encoder produces audio frames of variable length such that a mean effective audio frame length $\overline{F}$ equals the video frame length $1/f_v$ over an integral number M video and N audio frames, ~~by provision of~~ and the audio frames j each have a variable overlap ~~to have~~ that provides an effective ~~in~~ length F in a defined sequence of frame lengths $F(j)$ at encoding.

Appl. No. 10/501,426   Page 5 of 9
Amendment and/or Response
Reply to Office action of 21 February 2008

18. (Currently amended) ~~An audio encoder according to~~ The audio endcoder of claim 17, where the variable overlaps include ~~for coding a stream having~~ a total of p short overlap~~s~~ of length O and a total of q long overlaps of length O+ in an overlap sequence, the encoder calculating the ~~head~~ overlap sequence using an algorithm that repeats after N frames.

19. (Currently amended) An audio decoder for decoding a stream that encodes audio and video data, ~~which~~ wherein the decoder calculates an expected effective frame length of an incoming frame based on a defined sequence of frame lengths, adjusts the actual length of the incoming frame to make it equal to the expected frame length, determines whether any block within a received frame is a redundant block or a non-redundant block, mapping the non-redundant blocks onto sub-band samples.

20. (Currently amended) ~~An audio decoder according to~~ The audio decoder of claim 19 ~~which modifies~~, wherein the decoder is configured to modify the overlap status of blocks in the data stream by application of one or more of a set of block operators to each block.

21. (Currently amended) ~~An audio decoder according to~~ The audio decoder of claim 20 ~~in which~~, wherein the set of operators includes one or more of: NOP, an operator that does not change the status of a blocks; DROP, an operator that changes the first non-redundant block from the head overlap into a redundant block; APPEND, an operator that changes the first redundant block from the tail overlap into a non-redundant block; and SHIFT, an operator that is a combination of both DROP and APPEND operators.